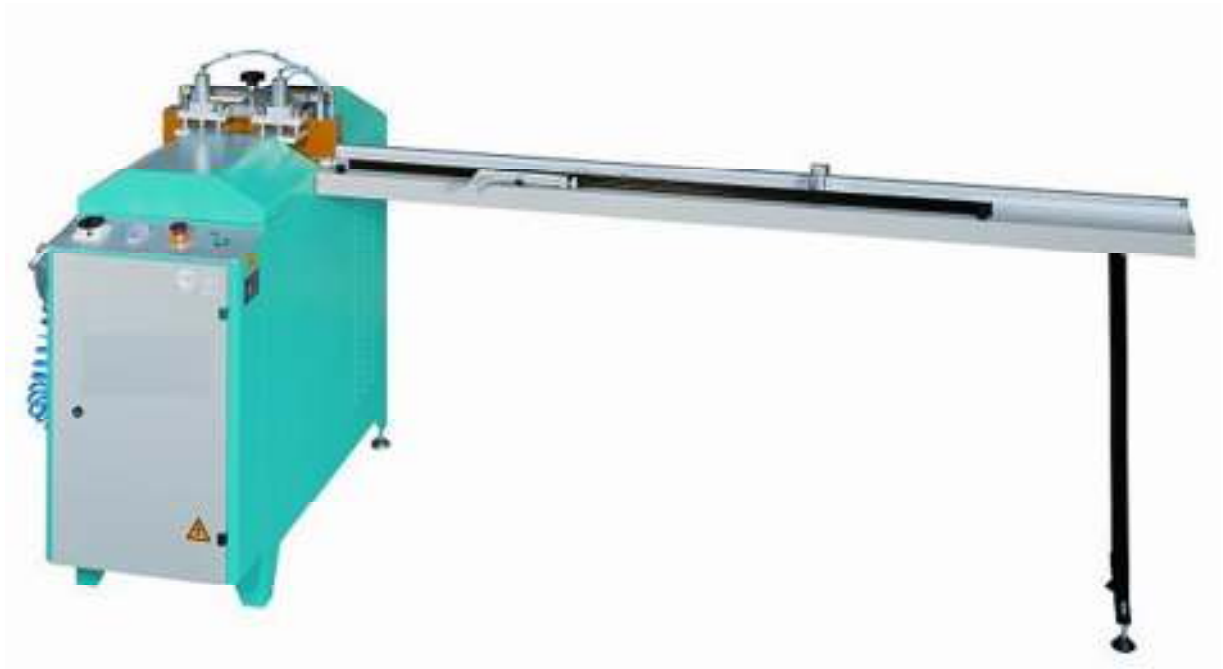




ZETA-02 A
AUTOMATIC DOUBLE GLAZING BEAD SAW
User's Manual



1. GENERAL INFORMATION

1.1. INTRODUCTION

The user's manual given by the manufacturer contains necessary information about the machine parts. Each machine operator should read these instructions carefully, and the machine should be operated after fully understanding them.

Safe and efficient use of the machine for long term depends on understanding and following the instructions contained in this manual. The technical drawings and details contained in this manual constitute a guide for the operator.

1.2. DISTRIBUTOR

ATech Machine, Inc.
10752-A Tucker Street – Beltsville, MD 20705 USA
Phone: +1-301-595-1816 Fax: +1-301-560-6627
Website: www.ATechMachinery.com E-mail: info@ATechMachinery.com

In case of any technical problem please contact your nearest ATECH dealer, or ATECH head office through the above mentioned phone, fax or e-mail address.

Technical labels with the model description of the machine are fixed onto the front side of each machine.

The machine's serial number and manufacturing year are stipulated on the technical label.



CONTENTS

1. General information

1.1. Introduction

1.2.

2. Machine's description and purpose of use

2.1. Machine's definition

2.2. Technical features

2.3. Dimensions

2.4. General views

3. Safety

3.1. Safety information

3.2. Accident prevention

3.3. General safety information

4. Transport of the Machine

5. Installation of the Machine

5.1. Preperation

5.2. Electric connection

6. Machine Safety Information

7. Operation

7.1. Cutting operation

7.2. Use of the KA 200 Easy measuring apparatus

8. Maintenance, Service and Repair

8.1. Starting to Work

8.2. Air Pressure Adjustments

8.3. Changing the cutter group

8.4. Maintenance at the End of Working Day

9. Troubleshooting guide



1.GENERAL INFORMATION

1.1. INTRODUCTION

The user's manual given by the manufacturer contains necessary information about the machine parts. Each machine operator should read these instructions carefully, and the machine should be operated after fully understanding them.

Safe and efficient use of the machine for long term depends on understanding and following the instructions contained in this manual. The technical drawings and details contained in this manual constitute a guide for the operator.

2. MACHINE'S DESCRIPTION AND PURPOSE OF USE

2.1. MACHINE'S DESCRIPTION

Cutting of PVC double glazing beads at 45° angle.

- Clamping system is pneumatic, while cutting is automatic.
- Cutting speed is adjustable.
- After finishing the cutting operation the saw blades return to their original position automatically.
- The machine has been designed according to UL, CSA and CE Safety Directives.

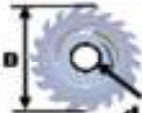
STANDARD ACCESSORIES

KN 152 Conveyor
KA 200 Easy measuring apparatus
Air gun
User's Manual
Ø200 Saw Blade
Ø110 Saw Blade
Screw wrench (for changing mold)

OPTIONAL ACCESSORIES

KN 152 Conveyor (Extra)

2.2. TECHNICAL FEATURES

TECHNICAL FEATURES							
				BAR	Have Tank Air Const		
ZETA-02 A	1200 W x 2 50 Hz 400 V AC 3 N PE	d= 30 / 32 mm D=200 mm	3000 dev/dak RPM	6-8 Bar	35 L/dak L/min	54x113x124	134

2.3 DIMENSIONS

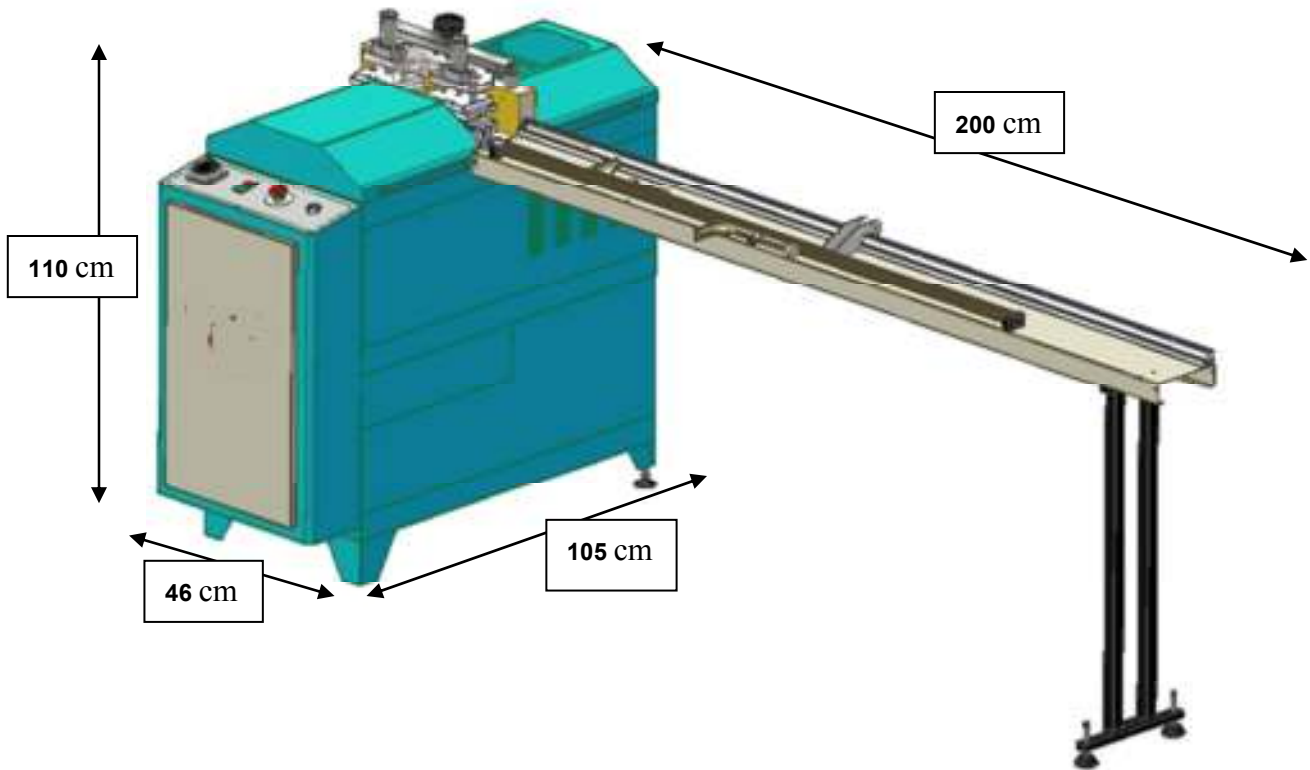


FIGURE 1

2.4 GENERAL VIEWS

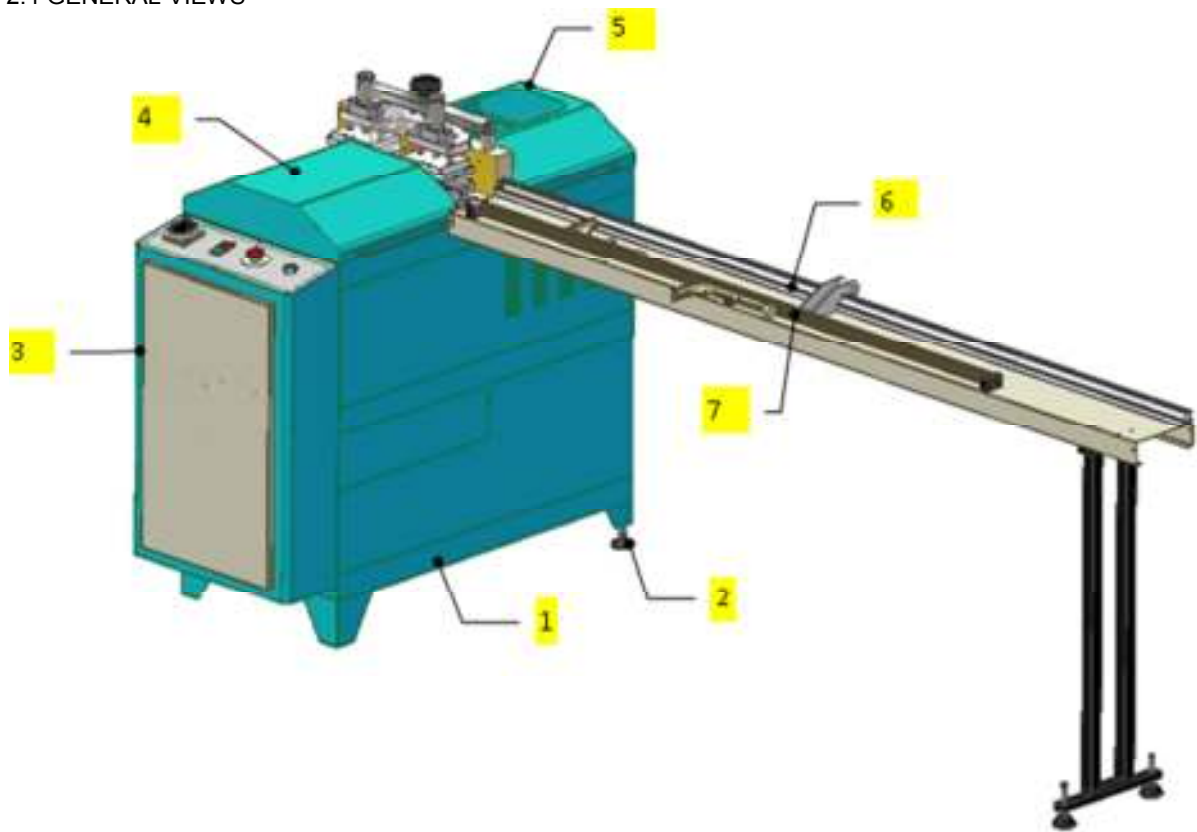
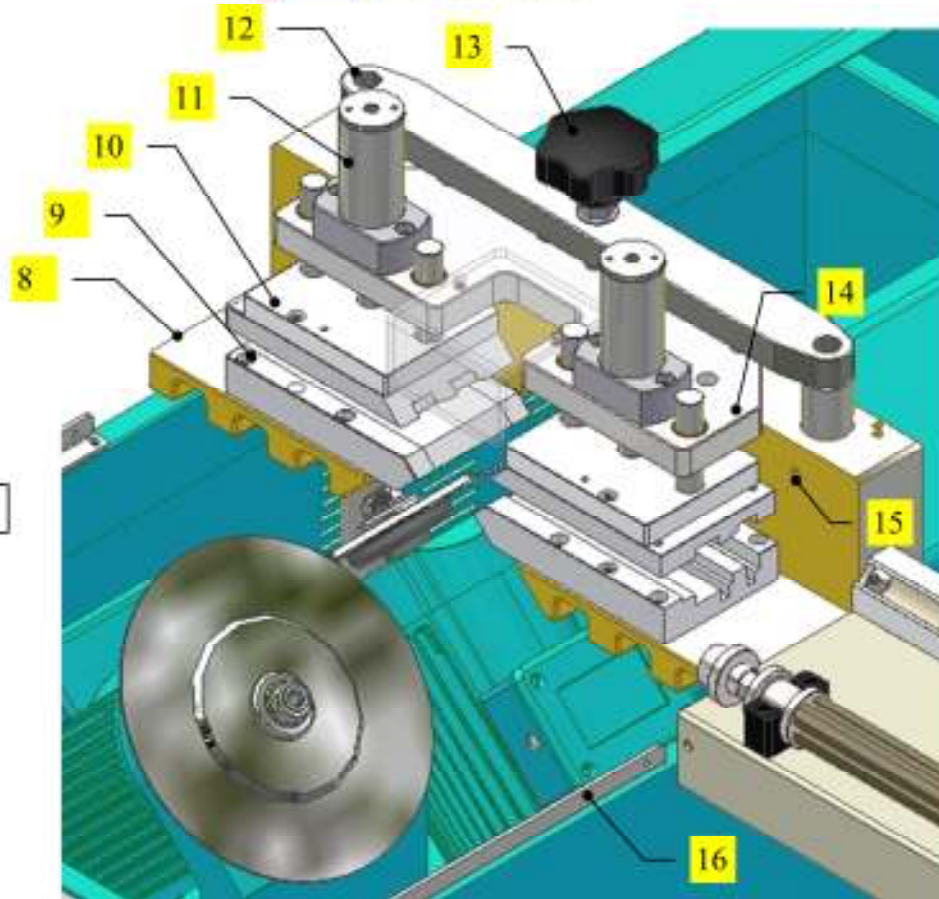


FIGURE 2

FIGURE 3



No.	STOCK CODE	QTY
1	1SA010000-0051	1
2	1SC170000-0005	2
3	1SA020000-0026	1
4	1SA030000-0050	1
5	1SA030000-0051	1
6	3UA010030-0010	1
7	3UA010030-0001	1
8	2TU012510-0309	1
9	LATH MOULD	1
10	2TU012210-0437	2
11	3UA590030-0002	2
12	2TU011210-0386	1
13	1PL020000-0008	1
14	2TU012510-0312	1
15	1SC151000-0007	2
16	2TU011441-0288	4
17	1PN080000-0009	1
18	1EL040000-0007	1
19	1EL090000-0008	1
20	1EL090000-0001	1
21	1EL090000-0003	1



FIGURE 4



3. SAFETY

3.1. SAFETY INFORMATION

The symbols shown hereunder are necessary to be read with special attention. Not reading or observing of them may cause damage to the equipment or personal injury.

IMPORTANT

The IMPORTANT symbol above is one telling to apply special care and to be careful at carrying out the specified operation

CAUTION !

The CAUTION! Symbol above warns you against specific dangers, and requires to read the text. Not observing may cause damage to the equipment..



DANGER WARNING

The above symbol DANGER WARNING, warns you against specific dangers, and you have definitely to read them. Negligence may cause damage to the equipment and bodily injury.

Read the user's manual carefully before using the machine or carrying out maintenance works.

3.2. ACCIDENT PREVENTION

3.2.1. Our machines are manufactured in accordance with UL, CSA and CE Safety Directives.

3.2.2. It is the task of the employer to warn his staff against accident risks, to train them on prevention of accidents, to provide for necessary safety equipment and devices for the operator's safety.

3.2.3. Before starting to work with the machine, the operator should check the features of the machine, learn all details of the machine's operation.



3.2.4. Machine should be operated only by staff members, who have read and understood the contents of this manual.

3.2.5. All directives, recommendations and general safety rules contained in this manual have to be observed fully. The machine cannot be operated in any way for purposes other than those described herein. Otherwise, the manufacturer shall not be deemed responsible for any damages or injuries. And such circumstances would lead to the termination of the warranty.

3.3. GENERAL SAFETY INFORMATION

3.3.1. The power cable should be led in such a way that nobody can step on it or nothing can be placed on it. Special care has to be taken regarding the inlet and outlet sockets.



3.3.2. If the power cable should be damaged during operation, don't touch and unplug it. Never use damaged power cables.

3.3.3. Don't overload machines for drilling and cutting. Your machine will operate more safely with power supply in accordance with the stipulated values.

3.3.4. Don't place your hands between parts in motion.



3.3.5. Use protective eye glasses and ear plugs. Don't wear oversize clothes and jewels. These can be caught by moving parts.



3.3.6. Keep your working place always clean, dry and tidy for accident prevention and safe operation.



3.3.7. Use correct illumination for the safety of the operator. (ISO 8995-89 Standard The lighting of indoor work system)

3.3.8. Don't leave anything on the machine.

3.3.9. Don't use any materials other than those recommended by the manufacturer for cutting operations on the machine.

3.3.10. Ensure that the work piece is clamped appropriately by the machine's clamp or vice.

3.3.11. Ensure safe working position, always keep your balance.



3.3.12. Keep your machine always clean for safe operation. Follow the instructions at maintenance and replacement of accessories. Check the plug and cable regularly. If damaged, let it replace by a qualified electrician. Keep handles and grips free of any oil and grease.

3.3.13. Unplug first, before conducting and maintenance works.

3.3.14. Ensure that any keys or adjustment tools have been removed before operating the machine.

3.3.15. If you are required to operate the machine outside, use only appropriate extension cables.

3.3.16. Repairs should be carried out by qualified technicians only. Otherwise, accidents may occur.

3.3.17. Before starting a new operation, check the appropriate function of protective devices and tools, ensure that they work properly. All conditions have to be fulfilled in order to ensure proper operation of your machine. Damaged protective parts and equipment have to be replaced or repaired properly (by the manufacturer or dealer).

3.3.18. Don't use machines with improper functioning buttons and switches.

3.3.19. Don't keep flammable, combusive liquids and materials next to the machine and electric connections.

IMPORTANT



4. TRANSPORT OF THE MACHINE

*** The transport should be done by qualified personnel only.**

4.1. The machine should be transported by lifting with proper equipment (not touching the ground during the transport).

4.2. The Machine is delivered wrapped in nylon as packaging, unless other form of packing is agreed upon with the customer.

4.3. For the weight and overall dimensions of the machine see Page 32.

5. INSTALLATION OF THE MACHINE

Necessary air and electrical facilities should be organized by the customer.

5.1. PREPERATION

5.1.1. The machine's dimension are shown in the Technical Features page (Page 33). The ground, where the machine will be placed, should be even, solid enough to bear the weight of the machine.

5.1.2. The machine should be located approx. 50 cm away from the back wall.

5.1.3. As a conveyor will be installed to its lateral surface, you should leave a distance equal to the conveyor length

5.2. ELECTRIC CONNECTION

5.2.1 The three-phase electric cable socket has to be in accordance with the socket on the machine.

5.2.2 The operating voltage is 400V 50 Hz. Check the supply voltage.

5.2.3 Use grounded sockets.

IMPORTANT !

5.2.4. Check the supply voltage. The supply voltage must be in accordance with the data stipulated on the machine's type label.

5.2.5. The electric connections have to be made by a qualified electrician, the rotation direction of the milling cutters has to be observed by starting the machine. If the milling cutters rotate in reverse direction, the socket connections have to be checked and re-connected properly.



5.2.6. If the cutters rotate in reverse direction, it will cause danger for the operator and the equipment.



6. MACHINE SAFETY INFORMATION

6.1. It is not allowed to operate the machine with the protective cover and other protective equipment removed.

6.2. Lifting, installation, electric, pneumatic maintenance of the machine should be carried out by qualified personnel only.

6.3. Routine maintenance and scheduled maintenance should be carried out by qualified personnel after unplugging the machine and disconnecting the air supply first.

6.4. Ensure that the machine has been cleaned, tested and maintained before starting to operate.

6.5. Check the safety devices, power cable and moving parts regularly. Don't operate the machine before having replaced defective safety devices or faulty parts.

6.6. Never replace the milling cutters before unplugging first.

6.7. Keep foreign materials away from the working area of the machine, keep away from the machine's moving parts.

IMPORTANT

The safety data have been defined above. In order to prevent physical damage or damage to the equipment, please read the safety information carefully and keep the manual always in an easy accessible place.



7. OPERATION

7.1. CUTTING OPERATION

7.1.1. Clean the glazing bead mould channels from any burr and foreign materials. Ensure especially that the glazing bead molds are clean.

7.1.2. Clean all surfaces of the machine from chip and foreign particles. Use eye glasses for protection.

7.1.3. Check with the appropriate keys that the milling cutters are tightened well.

7.1.4. Check the milling cutters for wear, bending and breaking. Replace them if damaged.

7.1.5. The CK 410 Automatic Glazing Bead Saw has been designed for cutting of aluminum and PVC glazing beads at 45° angle for making 90° corner joining.

7.1.6. Connect the air hose with appropriate inner diameter to the air inlet sleeve. (See FIGURE 5)

7.1.7. Switch the system start switch to "1" (FIGURE 4 – No.18)

7.1.8. Place the profile on the lath mould. Adjust the cutting length of the bead using the measuring tape and bead support plate.(FIGURE 2-No.6)

7.1.9. Start the electrical motor by pressing the motor start button. (FIGURE4 – NO.19)

7.1.10. Begin the cutting operation by pressing the cutting start button. The machine automatically performs cutting operation and returns back to its starting position. Stop the electrical motor by pressing the motor stop button. (FIGURE4 – NO:19)

7.1.11. To change the factory setted value of cutting feed, use the adjusting throttle in the electrica panel. (FIGURE2 – NO.3)

7.1.12. Up-Down adjustment of glazing bead mould can be performed by adjustment part on the machine. (FIGURE2 – NO.3). First loosen the set square fixing set screws (FIGURE2 – NO.15). Make the adjustment by turning the knob up/down. Then again tighten the set screws and nut.

7.1.13. Use emergency button (FIGURE4 – NO.20) by pressing in case of any irregularities.

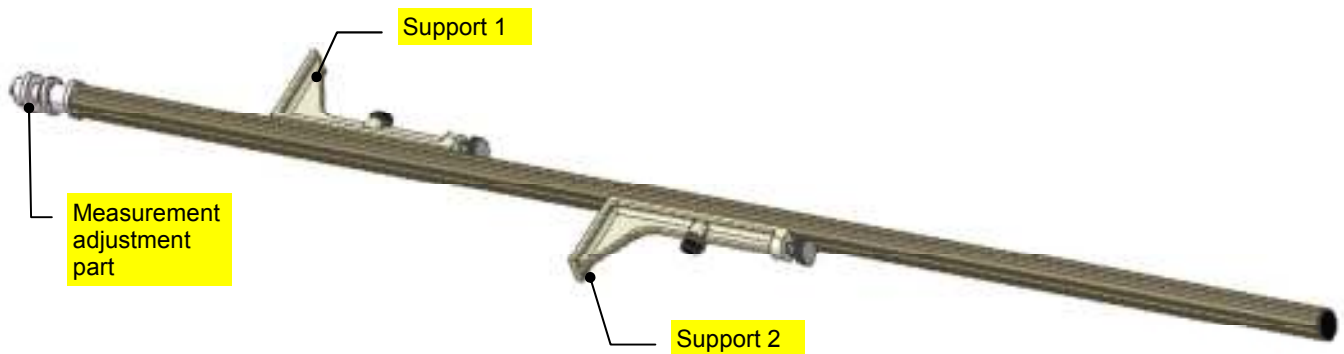
7.2. USE OF THE KA 200 EASY MEASURING APPARATUS

7.2.1. With the KA 200 Easy Measuring apparatus it is possible to apply two different distance measurements serially.

7.2.2. Press the measurement adjustment part against the upper inner section of the frame, which you want to take the reference measurement from

7.2.3. Press the part Support 1 against the lower inner section of the frame, where you want to take the reference measurement from, by loosening and moving the tightening handle. Tighten the handle again to fix the position.

7.2.4. You may repeat the above described operation for the part Support 2 as well to use it for the second reference measurement.



8. MAINTENANCE, SERVICE AND REPAIR

8.1 STARTING TO WORK

8.1.1. Ensure that the machine table and all kind of parts are clean and dry. Degrease and dry the machine table. Especially ensure that the holding grips and handles are clean and dry.

8.1.2. Clean all surfaces of the machine from chip and foreign particles. Use eye glasses for protection.

8.1.3 Check the milling cutters for wear, bending and breaking. Replace them if damaged.

8.1.4. Check the air pressure. Adjust the air pressure between 7 – 8 Bar

8.1.5. Check the air filters and the oil level in the conditioner. Fill up oil, if necessary



Always disconnect the electric and power supply first before carrying out these works.

If the machine is not active because of maintenance or service, put a warning message that can be easily seen, indicating the situation

8.2. AIR PRESSURE ADJUSTMENT

8.2.1. Pull the adjustment button of the conditioner upwards

8.2.2. Turning the adjustment button in clockwise direction increases the pressure.

8.2.3. Turning the adjustment button in counter clockwise direction decreases the pressure.

8.2.4. Once you read 6-8 Bar on the manometer, push the adjustment button of the conditioner down and lock it in that position.

8.2.5. To make up the lessen oil level in the oil tank, take out the oil depot by turning. And re-fasten the oil depot after make up.

8.2.6. The manufacturer recommends to use the following oils with the conditioner: TELLUS C 10 / BP ENERGOL HLP 10/ MOBIL DTE LIGHT / PETROL OFISI SPINDURA 10.

8.2.7. To discharge the accumulated water in the lubricator, loosen the water discharge nut.

8.2.8 Adjust the lubricator working level to once for 10 cycles.

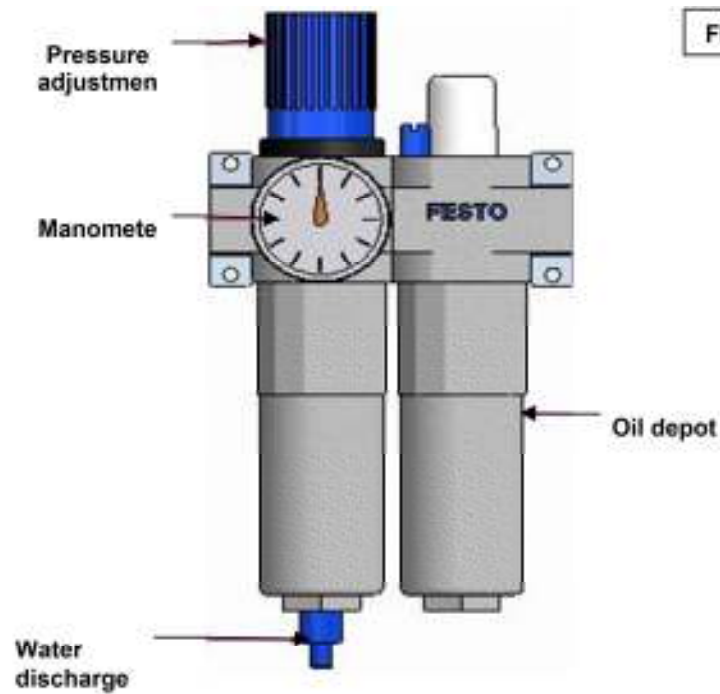


FIGURE 5

8.3. CHANGING THE CUTTER GROUP

8.3.1. Disconnect electric and pneumatic connections.

8.3.2. Open the upper protection covers. (FIGURE 2 –No.4-5)

8.3.3. Take out the nuts by using 8mm allen wrench and 22mm wrench as shown at the photo.

8.3.4. Take out the part consequently and put the saws to their place.

8.3.5. Reverse the operation and tighten the parts.



FIGURE 6





NOTE: ENSURE THAT THE SAW BLADES ROTATE IN CORRECT DIRECTION (THE CORRECT DIRECTION HAS BEEN MARKED ON THE MACHINE'S UPPER COVER)

8.4. MAINTENANCE AT THE END OF THE WORKING DAY

8.4.1. **Disconnect the electric and power supply.** (Main Switch in "0" position)

8.4.2. Remove all burr and foreign materials from the machine. If it is necessary to clean the inside of the protection cover, lift and clean it wearing protective gloves because of the cutters. Use protective eye glasses.

8.4.3. If you have used water or water based liquids during drilling operations, dry the machine with a dry cloth after the operation is finished.

8.4.4. If the machine will not be used for a long time, lubricate the unpainted sections of the machine as protection against corrosion.

8.4.5. Avoid damage to the paint when cleaning the machine.

8.4.6. Apply protective machine oil onto both surfaces of the milling cutters as protection against corrosion.

9. INFORMATION ABOUT FAULTY USE

9.1. Check the plug for power supply.

9.2. Ensure that the rotation direction of the milling cutters is correct. (the correct direction is marked on the upper cover).

9.3. Don't use too high cutting speeds. Adjust the cutting speed with the reducer valve

9.4. Never operate the machine with the protection covers open.